

CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 30 (CANCELED)

32. (PREVIOUSLY PRESENTED) The method of claim 58, wherein human N-kinase is recombinantly produced.

33. (CURRENTLY AMENDED) An *in vitro* method of identifying a compound that increases or decreases N-kinase dependent phosphorylation of a substrate comprising contacting N-kinase with a test compound and determining the ability of the test compound to increase or decrease N-kinase dependent phosphorylation of the substrate, wherein the N-kinase is bovine N-kinase. a compound that stimulates or inhibits axonal growth of a central nervous system neuron by increasing or decreasing bovine N-kinase dependent phosphorylation of a substrate comprising the steps of:

- a) contacting bovine N-kinase with a test compound;
- b) selecting a test compound that increases or decreases bovine N-kinase dependent phosphorylation of a substrate;
- c) contacting a central nervous system neuron, *in vitro*, with said selected test compound; and
- d) identifying a compound that stimulates or inhibits axonal outgrowth of the central nervous system neuron.

34. (CANCELED)

35. (CANCELED)

36. (PREVIOUSLY PRESENTED) The method of claim 58, wherein the test compound decreases human N-kinase dependent phosphorylation of the substrate.

37. (PREVIOUSLY PRESENTED) The method of claim 58, wherein the test compound increases human N-kinase dependent phosphorylation of the substrate.

38 – 57 (CANCELED)

58. (PREVIOUSLY PRESENTED) An *in vitro* method of identifying a compound that stimulates or inhibits axonal growth of a central nervous system neuron by increasing or decreasing human N-kinase dependent phosphorylation of a substrate comprising the steps of:

- a) contacting human N-kinase with a test compound;
- b) selecting a test compound that increases or decreases N-kinase dependent

- phosphorylation of a substrate;
- c) contacting a central nervous system neuron, *in vitro*, with said selected test compound; and
- d) identifying a compound that stimulates or inhibits axonal outgrowth of the central nervous system neuron.